

Pittsburgh Post-Gazette®

TUESDAY, JANUARY 13, 2009

FIGURING SPEECH



Stacy Innerst /Post-Gazette

CMU spinoff firm's software teaches non-native speakers clearer English

However, when the acoustics between the two sounds are altered enough, people can hear the difference.

"Show them the error and have them listen to the difference," she said. "That's something that is very, very unique to this software."

Often people learning English are taught by non-native English speakers. Consequently, they learn mostly through written exercises and not actually speaking the language.

"The fact that [NativeAccent users] can practice to their heart's content, in front of a computer, without judgment and without losing face, that's really important," Dr. Eskenazi said. "That's the great thing about it being Web-based."

With a headset microphone that can be plugged into a computer, users are able to access the NativeAccent software on servers around the world.

"You're able to speak the curriculum, and then it goes over the Internet to the servers that we have set up to host the software and does the analysis," Ms. Kennedy said.

Then, the software sends back to a student's computer a highlighted version of the word or sound – in red/yellow/green – visually pinpointing which segments of the word or sound the student got wrong, close or right. For example, if a student mispronounced the "t" in cantaloupe, the "t" would be highlighted in red while the rest of the word would be in green, indicating the rest of the pronunciation was correct, Ms. Kennedy explained.

Any business or government agency that needs employees to speak intelligible English can use Carnegie Speech products. U.S. businesses that outsource operations to foreign countries, for example some U.S. companies that operate call centers in India for U.S. customers, use NativeAccent.

"In the U.S. government sector, we are training spoken English and training foreign language," Ms. Kennedy said. "We've taken the same technology and are teaching Americans to speak Iraqi Arabic, and we're about to produce a spoken Russian project for the intelligence agencies, as well."

This month, Carnegie Speech, together with partner Mayflower College in Plymouth, England, is launching a new product geared toward international pilots and air traffic controllers, who have to meet new spoken English requirements by March 2011.

Adult education also is a huge market for NativeAccent. Its individualized curriculum offers the most effective training in a minimal amount of training time because it focuses on users' problem areas.

"It's like having a one-on-one tutor who is customizing a curriculum for you at every point in your training," Ms. Kennedy said.

With as little as 10 hours of training, clients are improving their speaking skills an average of 30 percent, and after 20 to 40 hours of training, users are improving 50 to 100 percent, she said.

Ms. Liu, a graduate student, uses the software in a course she's

taking at the L2 Accent Reduction Centre in Vancouver to master speaking a business/professional level of spoken English while others use it to master basic English.

Christy Rhodes, an adult literacy education instructor with the Pasco County Schools in Newport Richey, Fla., uses NativeAccent to help her students – many of whom are immigrants – improve their spoken English.

"Many come to our classes within three months of arriving in the U.S.," Ms. Rhodes said. "We focus on general life skills English. We really focus on letters and sounds."

And again, accent eradication isn't the goal.

"There are many people in the world who need to speak English," Dr. Eskenazi said. "There are few people in the world who want to get rid of their accent."

Mika Smith, a native Japanese speaker, has been using the NativeAccent software for about two months in classes at the L2 Accent Reduction Centre. She finds the face-to-face instruction combined with the online NativeAccent lessons extremely helpful.

In the classroom, face-to-face lessons, her instructor teaches her how to properly position her tongue and mouth to make the correct sounds, and NativeAccent gives her online exercises for English pronunciations of specific sounds such as "th," "ou" and "r," said Ms. Smith, 38, of Port Moody, near Vancouver. Her instructor also can review her online lessons and make suggestions.

"I need to improve not only my speaking with a correct accent, but also most importantly to regain confidence as an independent career person," said Ms. Smith, who is taking an English communication course at the British Columbia Institute of Technology and studying English technical writing. "The language issue is a serious obstacle for [immigrants] to re-establish our career at a workplace and [have] independence in society."

Many skilled and educated immigrants have a difficult time re-establishing their careers in a new country because of their strong accents or poor English, she said.

However, she is optimistic she can improve enough to pursue a career in customer service.

And she's taking the right approach.

"When you're learning a language, the attitude you come in with and the self-assurance you have are big contributors to whether you'll be successful," Dr. Eskenazi said.

For more information about Carnegie Speech visit www.carnegiespeech.com.

By L.A. Johnson
Pittsburgh Post-Gazette

Mia Liu, a Chinese MBA student at the University of British Columbia, wants to speak clear, precise English for business and pleasure.

That's why she's using Carnegie Speech's NativeAccent software to improve her spoken English.

Carnegie Speech, a Carnegie Mellon University spin-off company, in 2004 started marketing its NativeAccent software and Carnegie Speech Assessment software, which pinpoints errors in sound, rhythm and pitch.

"The software can record my own voice, my own pronunciations, and tell me which vowels I couldn't pronounce right," said Ms. Liu, 33, via telephone on break at home in Chongqing, China. "I can compare it with the native [English] speaker's pronunciation and check the differences."

Ms. Liu, whose native language is Mandarin, can access the software program from any computer in the world – at school in Vancou-

ver, B.C. or in China – practice her spoken English exercises in private and receive feedback and additional exercises specifically tailored to her problem areas.

"What we're really looking to do is help people become intelligible in their speech, not really eradicate all traces of their native accent," said Angela Kennedy, Carnegie Speech's chief executive officer.

With the Internet and the global economy, the need for people to be understood across the world has spun into a \$6 billion-a-year market for these types of products in a variety of sectors, including business outsourcing, U.S. adult education, U.S. government (in the areas of commerce, intelligence, the State Department and armed services) and aviation.

English is the international language of commerce, Ms. Kennedy said, and multinational businesses – especially those that outsource – use the software in multiple countries around the world to train their globally diversified work forces.

People speaking more than 40 foreign languages – including Arabic, Bengali, Farsi, French, Greek, Italian, Japanese, Kazak, Khmer, Mandarin, Montenegrin, Punjabi, Russian, Slovak, Spanish, Tagalog, Thai and Turkish – use Carnegie Speech products, including NativeAccent software, to improve their spoken English.

Strong client bases are in India, the Philippines, Latin America and Eastern Europe, with burgeoning markets in China and Japan.

People can learn a language at any age, but if a new language has a different writing system or more sounds than one's native language, learning the new language can be more difficult, said Dr. Maxine Eskenazi, inventor of the NativeAccent pinpointing technology and Carnegie Speech's chief technical officer.

"When Japanese people learn English, they don't have discrimination between 'r' and 'l'; to them that's just one sound," said Dr. Eskenazi, an expert in the area of speech recognition technology.